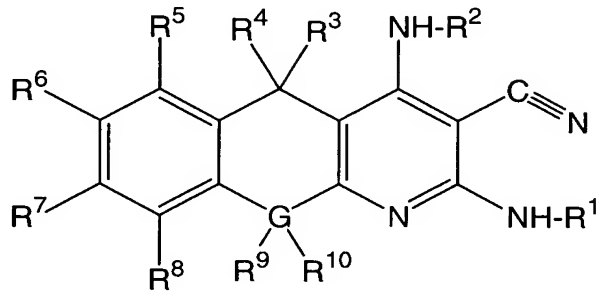
WHAT IS CLAIMED IS:

1. An aminocyanopyridine compound having the structure:



wherein:

each of R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 is independently selected from the group consisting of

hydrogen, hydroxy, amino, halo, nitro,

branched or unbranched C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkoxy, hydroxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 alkenoxy,

branched or unbranched amino C_1-C_6 alkyl, diamino C_2-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, C_1-C_6 alkylamino, di-(C_1-C_6 alkyl)amino, C_1-C_4 alkoxyarylamino, C_1-C_4 alkoxyalkylamino, amino C_1-C_6 alkoxy, di-(C_1-C_4 alkylamino, C_2-C_6 alkoxy, di-(C_1-C_6 alkyl)amino C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkoxy, halo C_1-C_6 alkoxy, dihalo C_1-C_6 alkoxy, trihalo C_1-C_6 alkoxy, cyano C_1-C_6 alkyl, dicyano C_1-C_6 alkyl, cyano C_1-C_6 alkoxy, dicyano C_1-C_6 alkoxy, carbamyl C_1-C_4 alkoxy, heterocyclyl C_1-C_4 alkoxy, heteroaryl C_1-C_4 alkoxy, sulfo, sulfamyl, C_1-C_4 alkylaminosulfonyl, hydroxy C_1-C_4 alkylaminosulfonyl, di-(C_1-C_4 alkyl)aminosulfonyl, C_1-C_4 alkylthio, C_1-C_4 alkylsulfonyl, C_1-C_4 alkylsulfinyl,

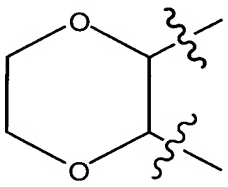
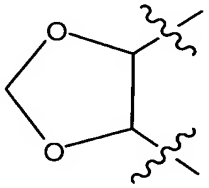
aryl, aryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkyl, heteroaryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkoxy, heteroaryl C_1-C_6 alkoxy, aryl C_1-C_6 alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, halo, amino, and C_1-C_6 alkoxy,

substituted or unsubstituted C_3-C_6 cyclyl, C_3-C_6 heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, C_1-C_6 alkoxy, halo, amino, and where the C_3-C_6 heterocyclyl ring contains O, S, or N,

branched or unbranched C_1-C_6 alkoxycarbonyl C_1-C_6 alkoxy, and

carboxy, carboxy C_1-C_6 alkoxy, carboxy C_1-C_6 alkyl, hydroxy C_1-C_4 alkoxycarbonyl, C_1-C_4 alkoxycarbonyl,

where R^6 and R^7 are such that they optionally join to form a ring system of the type selected from

 , and  ;

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R^9 and R^{10} are absent;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is nitrogen, R^4 is hydrogen, R^9 is absent, and R^{10} is C_1-C_4-alkyl.

2. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is selected from the group consisting of hydrogen, branched or unbranched alkyl, alkenyl, alkynyl, alkoxy, alkylaryl, arylalkyl, carboxy, carboxyalkyl, hydroxyalkyl, alkylcarboxy, aryl, amino, aminoalkyl, alkylamino, halo, alkylaminoalkyl, alkoxy, alkoxyalkyl, monocyclyl, bicyclyl, polycyclyl, and heterocyclyl;

R^2 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, alkoxy, hydroxyalkyl, alkylaryl, arylalkyl, alkoxyaryl, aminoalkyl, alkylaminoalkyl, arylaminoalkyl, alkoxyalkyl, alkylcarboxy, and carboxyalkyl;

R^3 is selected from the group consisting of hydrogen, dicyanoalkyl, and substituted or unsubstituted heterocyclyl and cyclyl, where substituents, if any, comprise halo moieties;

R^4 is selected from the group consisting of hydrogen, dicyanoalkyl, and substituted or unsubstituted heterocyclyl and cyclyl, where substituents, if any, comprise halo moieties;

R^5 is selected from the group consisting of hydrogen, alkoxy, halo, alkyl, alkenyl, alkylyl, arylalkyl, and alkylaryl;

R^6 is selected from the group consisting of hydrogen, hydroxy, alkoxy, alkyl, alkenyl, alkynyl, amino, alkylamino, arylamino, alkylaminoalkyl, carboxy, aminoalkoxy, halo, alkylcarboxyalkyl, alkylamino, aminoalkyl, nitro, aryl, arylalkyl, alkylaryl, and arylamino;

R^7 is selected from the group consisting of hydrogen, hydroxy, alkoxy, alkenoxy, hydroxyalkoxy, alkoxyalkoxy, aminoalkoxy, heterocyclylalkyl, heterocyclylalkoxy, carboxyalkoxy, alkylaminoalkoxy, and alkylcarboxyalkoxy;

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, nitro, amino, alkyl, alkoxy, heterocyclylalkoxy, carboxyalkoxy, pyrrolidylethoxy, carboxymethoxy, hydroxyalkoxy, aminoalkoxy, alkylcarboxy, alkylaminoalkyl, carboxy, and heterocyclylalkyl; and

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R^9 and R^{10} are absent;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is nitrogen, R^9 is absent, and R^{10} is C_1-C_4-alkyl.

3. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is selected from the group consisting of hydrogen, ethyl, dimethylaminoethyl, butyl, propyl, methoxyethyl, tetramethylaminoethyl, and carboxymethyl;

R^2 is selected from the group consisting of hydrogen, hydroxyethyl, propyl, ethyl, methyl, 4-methoxyphenyl, ethoxyethyl, aminoethyl, phenylmethyl, dimethylaminoethyl, phthaloaminoethyl, butyl, methoxyethyl, tetramethylaminoethyl, and carboxymethyl;

R^3 is selected from the group consisting of hydrogen, dicyanomethyl, 2-fluorophenyl, phenyl, and 3-fluorophenyl.

R^4 is selected from the group consisting of hydrogen, dicyanomethyl, 2-fluorophenyl, phenyl, and 3-fluorophenyl;

R^5 is selected from the group consisting of hydrogen, hydroxy, methoxy, bromo, and 2-pyridomethyl;

R^6 is selected from the group consisting of hydrogen, hydroxy, methoxy, amino, carboxy, diaminoethoxy, bromo, propoxy, isobutylcarboxymethoxy, dimethylamino, nitro, phenyl, chloro, pyridylmethyl, and fluoro;

R^7 is selected from the group consisting of hydrogen, hydroxy, methoxy, hydroxyethoxy, ethoxyethoxy, ethoxy, aminoethoxy, morpholinoethoxy, carboxymethoxy, *N*-pyrrolidylethoxy, dimethylaminoethoxy, pyridylmethyl, 2-propenoxy, and isobutylcarboxymethoxy,

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, fluoro, methoxy, nitro, amino, pyrrolidylethoxy, carboxymethoxy, methyl, hydroxyethoxy, aminoethoxy, 4-pyridylmethoxy, isobutyl, ethylcarboxy, dimethylaminoethoxy, carboxy, bromo, and pyrridylmethyl; and

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R^9 and R^{10} are absent;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is nitrogen, R^9 is absent, and R^{10} is $-CH_3$.

4. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is selected from the group consisting of hydrogen, and C_1-C_2 alky;

R^2 is selected from the group consisting of hydrogen, C_1-C_3 alkyl, hydroxy C_1-C_2 alkyl, C_1-C_2 alkoxyphenyl, C_1-C_2 alkoxy C_1-C_2 alkyl, amino C_1-C_2 alkyl, phenyl C_1-C_2 alkyl, and di C_1-C_2 alkylamino C_1-C_2 alkyl;

R^3 and R^4 are each independently selected from the group consisting of hydrogen, dicyano C_1-C_2 alkyl, and halophenyl;

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_3 alkoxy, amino, nitro, carboxy, diamino C_1 - C_2 alkoxy, halo, propenoxy, iso C_3 - C_4 alkylcarboxy C_1 - C_2 alkoxy, di C_1 - C_2 alkylamino, and phenyl;

R^7 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_3 alkoxy, hydroxy C_1 - C_2 alkoxy, C_1 - C_2 alkoxy C_1 - C_2 alkoxy, amino C_1 - C_2 alkoxy, morpholino C_1 - C_2 alkoxy, carboxyl C_1 - C_2 alkoxy, pyrrolidyl C_1 - C_2 alkoxy, di C_1 - C_2 alkylamino C_1 - C_2 alkoxy, pyrrolidyl C_1 - C_2 alkyl, iso C_3 - C_4 alkylcarboxy C_1 - C_2 alkoxy, and $_2$-propenoxy,

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, C_1-C_2 alkyl, C_1-C_2 alkoxy, nitro, amino, pyrrolidyl C_1-C_2 alkoxy, carboxy C_1-C_2 alkoxy, hydroxy C_1-C_2 alkoxy, and amino C_1-C_2 alkoxy; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is oxygen, R^9 and R^{10} are absent.

5. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is hydrogen;

R^2 is selected from the group consisting of hydrogen, C_1 - C_3 alkyl, hydroxy C_1 - C_2 alkyl, C_1 - C_2 alkoxyphenyl, C_1 - C_2 alkoxy C_1 - C_2 alkyl, amino C_1 - C_2 alkyl, phenyl C_1 - C_2 alkyl, and di C_1 - C_2 alkylamino C_1 - C_2 alkyl;

R^3 and R^4 are each independently selected from the group consisting of hydrogen, and dicyano C_1 - C_2 alkyl.

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1-C_2 alkoxy, amino, carboxy, nitro, diamino C_1-C_2 alkoxy, halo, 2-propenoxy, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, di C_1-C_2 alkylamino, and phenyl;

R^7 is selected from the group consisting of hydrogen, hydroxy, C_1 - C_2 alkoxy, hydroxy C_1-C_2 alkoxy, C_1-C_2 alkoxy C_1-C_2 alkoxy, amino C_1-C_2 alkoxy, morpholino C_1-C_2 alkoxy, carboxyl C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkoxy, di C_1-C_2 alkylamino C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkyl, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, and 2-propenoxy;

wherein the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, C_1-C_2 alkoxy, nitro, amino, pyrrolidyl C_1-C_2 alkoxy, and carboxy C_1-C_2 alkoxy; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is oxygen, R^9 and R^{10} are absent.

6. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is hydrogen;

R^2 is selected from the group consisting of hydrogen, C_1-C_3 alkyl, hydroxy C_1-C_2 alkyl, C_1-C_2 alkoxyphenyl, C_1-C_2 alkoxy C_1-C_2 alkyl, amino C_1-C_2 alkyl, and phenyl C_1-C_2 alkyl;

R^3 and R^4 are each independently selected from the group consisting of hydrogen, and dicyano C_1-C_2 alkyl.

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1-C_2 alkoxy, amino, carboxy, diamino C_1-C_2 alkoxy, halo, 2-propenoxy, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, and di C_1-C_2 alkylamino;

R^7 is selected from the group consisting of hydrogen, hydroxy, C_1-C_2 alkoxy, hydroxy C_1-C_2 alkoxy, C_1-C_2 alkoxy C_1-C_2 alkoxy, amino C_1-C_2 alkoxy, morpholino C_1-C_2 alkoxy, carboxyl C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkoxy, di C_1-C_2 alkylamino C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkyl, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, and 2-propenoxy,

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, C_1-C_2 alkoxy, nitro, amino, and pyrrolidyl C_1-C_2 alkoxy; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is oxygen, R^9 and R^{10} are absent.

7. The aminocyanopyridine having the structure shown in claim 1, where:

R^1 is hydrogen;

R^2 is selected from the group consisting of hydrogen, C_1-C_3 alkyl, hydroxy C_1-C_2 alkyl, C_1-C_2 alkoxyphenyl, C_1-C_2 alkoxy C_1-C_2 alkyl, and amino C_1-C_2 alkyl;

R^3 and R^4 are each independently selected from the group consisting of hydrogen, and dicyanoethyl;

R^5 is selected from the group consisting of hydrogen, and hydroxy;

R^6 is selected from the group consisting of hydrogen, hydroxy, C_1-C_2 alkoxy, amino, carboxy, diamino C_1-C_2 alkoxy, halo, 2-propenoxy, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, and di C_1-C_2 alkylamino;

R^7 is selected from the group consisting of hydrogen, hydroxy, C_1-C_2 alkoxy, hydroxy C_1-C_2 alkoxy, C_1-C_2 alkoxy C_1-C_2 alkoxy, amino C_1-C_2 alkoxy, morpholino C_1-C_2 alkoxy, carboxyl C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkoxy, di C_1-C_2 alkylamino C_1-C_2 alkoxy, pyrrolidyl C_1-C_2 alkyl, iso C_3-C_4 alkylcarboxy C_1-C_2 alkoxy, and 2-propenoxy,

where the R^6 and R^7 groups optionally join to form a six membered heterocyclic ring;

R^8 is selected from the group consisting of hydrogen, hydroxy, halo, methoxy, nitro, and amino; and

G is selected from the group consisting of oxygen and sulfur;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is oxygen, R^9 and R^{10} are absent.

8. An aminocyanopyridine compound that is selected from the group consisting of:

2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,

2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile

2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
tert-butyl {[2,4-diamino-7-(2-tert-butoxy-2-oxoethoxy)-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl]oxy}acetate,
2-amino-4-[(2-aminoethyl)amino]-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-(dimethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-9-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-4-(benzylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8-(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-10-methyl-5,10-dihydrobenzo[b]-1,8-naphthyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,
2-amino-4-{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-phenyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-chloro-9-methyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
8-ethoxy-2,4-bis(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-5-(2-fluoro-phenyl)-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-chloro-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-bis{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-{[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(pyridin-4-ylmethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-chloro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-tert-butyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
ethyl 2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-9-carboxylate,

2,4-diamino-9-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(butylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(butylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-dimethoxy-2,4-bis(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(ethylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-(trifluoromethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-bromo-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-methoxy-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,9-diamino-10H-[1,3]dioxolo[6,7]chromeno[2,3-b]pyridine-8-carbonitrile,
7,9-diamino-10H-[1,3]dioxolo[6,7]chromeno[2,3-b]pyridine-8-carbonitrile,
2,4-diamino-8-methyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-dimethoxy-2,4-bis[(2-methoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(2-methoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(2-pyrrolidin-1-ylethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-dimethoxy-2,4-bis[(2-pyrrolidin-1-ylethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(glycinyl)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
N-(2-amino-3-cyano-7,8-dimethoxy-5H-chromeno[2,3-b]pyridin-4-yl)glycine,

2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-9-carboxylic acid,
2,4-diamino-6-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-bromo-7-chloro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-bis(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6-bromo-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-7,9-bis(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-5-phenyl-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-5-(3-fluoro-phenyl)-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-6,8-bis(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-bromo-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-5-phenyl-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-methoxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,9-dimethyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7-isopropyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7-ethyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7-methyl-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7-chloro-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7-bromo-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-5-oxo-5H-chromeno[2,3-b]pyridine-3-carbonitrile, and
3-amino-5H-pyrido[3,4-b][1,4]benzothiazine-4-carbonitrile.

9. The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:
2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,
2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile
2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile, [(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,

2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
tert-butyl {[2,4-diamino-7-(2-tert-butoxy-2-oxoethoxy)-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl]oxy}acetate,
2-amino-4-[(2-aminoethyl)amino]-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-bromo-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-(dimethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-9-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-4-(benzylamino)-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8-(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-7-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-10-methyl-5,10-dihydrobenzo[b]-1,8-naphthyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-9-yl)oxy]acetic acid,
2-amino-4-{[2-(dimethylamino)ethyl]amino}-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-nitro-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile 10,10-dioxide,
2,4-diamino-7-phenyl-5H-chromeno[2,3-b]pyridine-3-carbonitrile, and
prodrugs, salts, tautomers, and combinations thereof.

10. The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:
2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,
2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile
2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
[(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-7,8-di[2-(amino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-nitro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-hydroxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,

2(2,4-diamino-3-cyano-7-bromo-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2-amino-8-ethoxy-4-(ethylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,9-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-5H-thiochromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-[(4-methoxyphenyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-7-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile,
2,4-diamino-9-hydroxy-8-(piperidin-1-ylmethyl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
7,8-bis(allyloxy)-2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-8-(2-ethoxyethoxy)-4-[(2-ethoxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile, and
prodrugs, salts, tautomers, and combinations thereof.

11. The aminocyanopyridine compound according to claim 8, wherein the compound is selected from the group consisting of:
2,4-diamino-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-[(2-hydroxyethyl)amino]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7,8-dimethoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dihydroxy-4-(propylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-4-(ethylamino)-7,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-fluoro-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-hydroxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,

8,10-diamino-2,3-dihydro-11H-[1,4]dioxino[2',3':6,7]chromeno[2,3-b]pyridine-9-carbonitrile,
2,4,7-triamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile
2,4-diamino-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-9-hydroxy-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-6,8-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-ethoxy-7-hydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-ethoxyethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-aminoethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridine-7-carboxylic acid,
2,4-diamino-8,9-dihydroxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-morpholin-4-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile, [(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-8-yl)oxy]acetic acid,
2,4-diamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-(2-pyrrolidin-1-ylethoxy)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2-amino-7,8-dimethoxy-4-(methylamino)-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4-diamino-8-[2-(dimethylamino)ethoxy]-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2,4,7-triamino-9-methoxy-5H-chromeno[2,3-b]pyridine-3-carbonitrile,
2(2,4-diamino-3-cyano-8-methoxy-5H-chromeno[2,3-b]pyridin-5-yl)malononitrile, and
prodrugs, salts, tautomers, and combinations thereof.

12. The aminocyanopyridine compound according to claim 1, wherein the compound is capable of inhibiting the activity of MK-2.

13. The aminocyanopyridine compound according to claim 1, wherein the compound provides an IC_{50} value of below 100 μM in an MK-2 activity inhibition assay.

14. The aminocyanopyridine compound according to claim 1, wherein the compound provides an MK-2 IC_{50} value of below 1 μM in an MK-2 activity inhibition assay.

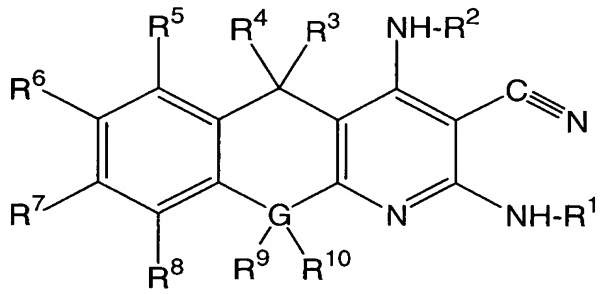
15. The aminocyanopyridine compound according to claim 1, wherein the compound provides a TNFα release IC_{50} value of below 200 μM in an *in vitro* cell assay.

16. The aminocyanopyridine compound according to claim 1, wherein the compound provides a TNFα release IC_{50} values of below 1μM in an *in vitro* cell assay.

17. The aminocyanopyridine compound according to claim 1, wherein the compound provides a degree of inhibition of TNFα in a rat LPS assay of at least about 25%.

18. The aminocyanopyridine compound according to claim 1, wherein the aminocyanopyridine MK-2 inhibiting compound provides a degree of inhibition of TNFα in a rat LPS assay of above 80%.

19. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an aminocyanopyridine MK-2 inhibiting compound having the structure:



wherein:

each of R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 is independently selected from the group consisting of

hydrogen, hydroxy, amino, halo, nitro,

branched or unbranched C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkoxy, hydroxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 alkenoxy,

branched or unbranched amino C_1-C_6 alkyl, diamino C_2-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, C_1-C_6 alkylamino, di-(C_1-C_6 alkyl)amino, C_1-C_4 alkoxyarylamino, C_1-C_4 alkoxyalkylamino, amino C_1-C_6 alkoxy, di-(C_1-C_4 alkylamino, C_2-C_6 alkoxy, di-(C_1-C_6 alkyl)amino C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkoxy, halo C_1-C_6 alkoxy, dihalo C_1-C_6 alkoxy, trihalo C_1-C_6 alkoxy, cyano C_1-C_6 alkyl, dicyano C_1-C_6 alkyl, cyano C_1-C_6 alkoxy, dicyano C_1-C_6 alkoxy, carbamyl C_1-C_4 alkoxy, heterocyclyl C_1-C_4 alkoxy, heteroaryl C_1-C_4 alkoxy, sulfo, sulfamyl, C_1-C_4 alkylaminosulfonyl, hydroxy C_1-C_4 alkylaminosulfonyl, di-(C_1-C_4 alkyl)aminosulfonyl, C_1-C_4 alkylthio, C_1-C_4 alkylsulfonyl, C_1-C_4 alkylsulfinyl,

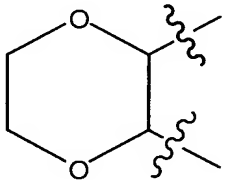
aryl, aryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkyl, heteroaryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkoxy, heteroaryl C_1-C_6 alkoxy, aryl C_1-C_6 alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, halo, amino, and C_1-C_6 alkoxy,

substituted or unsubstituted C_3-C_6 cyclyl, C_3-C_6 heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, C_1-C_6 alkoxy, halo, amino, and where the C_3-C_6 heterocyclyl ring contains O, S, or N,

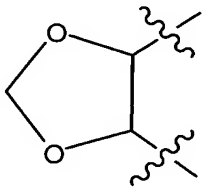
branched or unbranched C_1-C_6 alkoxycarbonyl C_1-C_6 alkoxy, and

carboxy, carboxy C_1-C_6 alkoxy, carboxy C_1-C_6 alkyl, hydroxy C_1-C_4 alkoxycarbonyl, C_1-C_4 alkoxycarbonyl,

where R^6 and R^7 are such that they optionally join to form a ring system of the type selected from



, and



;

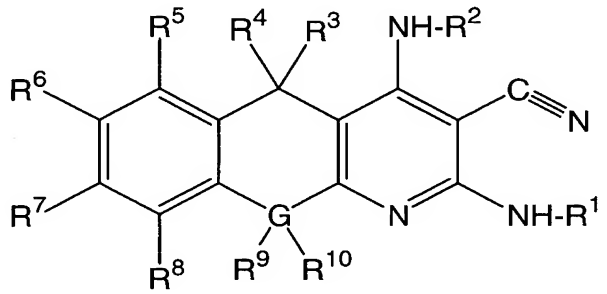
G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R^9 and R^{10} are absent;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is nitrogen, R^9 is absent, and R^{10} is C_1-C_4-alkyl.

20. A kit comprising a dosage form containing an aminocyanopyridine MK-2 inhibiting compound having the structure:



wherein:

each of R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 is independently selected from the group consisting of

hydrogen, hydroxy, amino, halo, nitro,

branched or unbranched C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkoxy, hydroxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 alkenoxy,

branched or unbranched amino C_1-C_6 alkyl, diamino C_2-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, C_1-C_6 alkylamino, di-(C_1-C_6 alkyl)amino, C_1-C_4 alkoxyarylamino, C_1-C_4 alkoxyalkylamino, amino C_1-C_6 alkoxy, di-(C_1-C_4 alkylamino, C_2-C_6 alkoxy, di-(C_1-C_6 alkyl)amino C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkoxy, halo C_1-C_6 alkoxy, dihalo C_1-C_6 alkoxy, trihalo C_1-C_6 alkoxy, cyano C_1-C_6 alkyl, dicyano C_1-C_6 alkyl, cyano C_1-C_6 alkoxy, dicyano C_1-C_6 alkoxy, carbamyl C_1-C_4 alkoxy, heterocyclyl C_1-C_4 alkoxy, heteroaryl C_1-C_4 alkoxy, sulfo, sulfamyl, C_1-C_4 alkylaminosulfonyl, hydroxy C_1-C_4 alkylaminosulfonyl, di-(C_1-C_4 alkyl)aminosulfonyl, C_1-C_4 alkylthio, C_1-C_4 alkylsulfonyl, C_1-C_4 alkylsulfinyl,

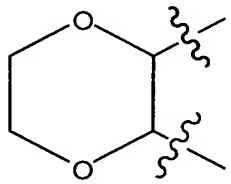
aryl, aryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkyl, heteroaryl C_1-C_6 alkyl, heterocyclyl C_1-C_6 alkoxy, heteroaryl C_1-C_6 alkoxy, aryl C_1-C_6 alkoxy, where the aryl ring can be substituted or unsubstituted, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, halo, amino, and C_1-C_6 alkoxy,

substituted or unsubstituted C_3-C_6 cyclyl, C_3-C_6 heterocyclyl, and, if substituted, the substituent group is selected from one or more of the group consisting of C_1-C_6 alkyl, C_1-C_6 alkoxy, halo, amino, and where the C_3-C_6 heterocyclyl ring contains O, S, or N,

branched or unbranched C_1-C_6 alkoxycarbonyl C_1-C_6 alkoxy, and

carboxy, carboxy C_1-C_6 alkoxy, carboxy C_1-C_6 alkyl, hydroxy C_1-C_4 alkoxycarbonyl, C_1-C_4 alkoxycarbonyl,

where R^6 and R^7 are such that they optionally join to form a ring system of the type selected from



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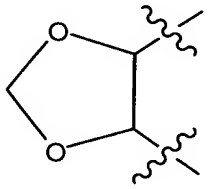

;

G is selected from the group consisting of oxygen, sulfur, and nitrogen;

when G is oxygen, R^9 and R^{10} are absent;

when G is sulfur, each of R^9 and R^{10} is optionally absent, or is oxo;

when G is nitrogen, R^9 is absent, and R^{10} is C_1-C_4-alkyl.